

*Gary Development
HCIC
Lake Co*

February 25, 1986

Stuart C. Miller, Chief
Facility Inspection Section-North

Bruce H. Palin
Richard T. Jones

Duane A. Leith
Engineering Section

Operating Permit Renewal
Gary Development Landfill
OPP 45-2, SW 133
Lake County

0000726

Staff has completed their review of the operating permit renewal application for the Gary Development Landfill received at the Division of Land Pollution Control on February 11, 1985. Based on the comments of the inspector, Mr. Steve C. Schafer; the geologist, Mr. Richard T. Jones; and the engineer, Mr. Duane A. Leith, approval of the project is not recommended due to the following summary of noncompliance with regulations and deviations from the construction plans as approved by the Agreed Order dated February 18, 1983:

1. Six of the 28 inspections from August 10, 1982, to August 8, 1985, were rated unacceptable. The facility has not been substantially in compliance with 330 IAC 4-5-13, therefore, denial is required by 330 IAC 4-8-2(a). Sixty percent of the inspections from the 1983 calendar year were rated unacceptable. This is greater than the 40 percent unacceptable ratings allowed in paragraph 9 of the Agreed Order.
2. Item 7 of the Agreed Order specifies soil borings and tests to be performed on the site's west section of the clay perimeter wall. The Order requires that four soil borings be taken. The Order requires that five shelby tube samples be taken, but only four were reported, one from each boring. The information requested on the split spoon samples has not been provided for borings B-1 through B-3. Specifically, the record of blow counts and the log of observations, including any irregularities or voids encountered, must be submitted.

This detailed information presented from boring B-4 does show that there is only two and one-half feet of clay at nine to 11 1/2-foot depth from the surface. Above this is landfill and clay intermixed, and below the clay is sand. Page 12 of the construction plans, received November 17, 1980, which the EMB approved, and which the February 16, 1982, permit renewal and subsequent order referred to, details the wall construction.

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The wall was to have been 25-30 feet in width keyed into the underlying clay to a depth of three feet and with a total depth of over 30 feet. The wall was to slant outward at the top or toward the property line on a one-to-one slope. A vertical boring through the wall under those conditions would encounter 25 feet of clay. The two and one-half foot thickness of clay encountered, shows that the wall thickness is inadequate. It shows that the wall is not keyed into the underlying clay at that point due to the occurrence of sand beneath the clay.

3. Drainage swale A, as shown on sheet 2 of the plans, has not been properly constructed. There is a low spot in this area in which water ponds.
4. Leachate collection components have not been installed, as shown on sheets 3 and 8 of the plans, yet filling has progressed beyond the interim grading stage, shown on sheet 3.
5. Leachate seeps, along the central low area and along the north area, are not being controlled or stopped. This leachate flows directly into, or is washed by precipitation run-off, to the surface water collection pond from which it may be pumped into the Grand Calumet River. There are leachate seeps along the west wall near the water ponded in that area.
6. The vegetative cover has not been established as on page 12 of the Narrative.

The following points should also be considered:

1. The amount of clay available for wall construction and cover visually appears to be inadequate. Calculations based on the renewal map received February 11, 1985, and on the proposed excavation depth of 37 feet, projected adequate volume of clay. A recent site visit casts doubt on the accuracy of the renewal map and on the practicality of excavating 37 feet in an area already plagued with voluminous leachate flows, groundwater infiltration, and precipitation accumulation. A survey is needed to closely determine the area remaining for excavation and to project a realistic excavation depth in order to verify the adequacy of clay volume.
2. Groundwater samples taken on July 26, 1984, and on July 30, 1985, both exhibit groundwater contamination. Levels of numerous parameters are above the interim primary and secondary drinking water levels.

DAL/kp

cc: Mr. David M. Brown
Mr. Steve C. Schafer

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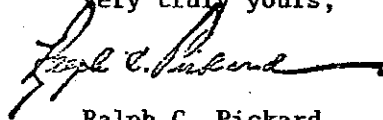
6. That the seepage collector pond detailed on Page 7 of the Engineering Plan not be installed unless a seepage problem is identified. If a seepage problem is identified, a temporary collector pond must be located as close as possible to the area until seepage is properly sealed.
7. That the dike between the Grand Calumet River and the landfill be increased in elevation to 589.7 MSL.
8. That the four on-site monitoring wells be sampled on a quarterly basis. The sampling months are January, April, July, and October with samples to be taken and analyzed at the end of each of these months and results submitted by the end of the following month. Parameters to be tested include Chloride, Chemical Oxygen Demand, Total Hardness, Total Iron, and Total Dissolved Solids.
9. That hazardous waste as defined in 330 IAC 4-2-1 not be accepted at this site after 60 days from date of receipt of this letter. All current hazardous waste approvals for this site will be considered void at that time.

If you, as applicant, find that the terms and conditions of this permit are objectionable, you may petition for a hearing before the Environmental Management Board within fifteen (15) days after the date of receipt of this permit in accordance with Indiana Code 13-7-10-4(a).

If you have any questions regarding this matter, please contact Mr. Mark Richards of the Division of Land Pollution Control at 317/633-0657.

The operating permit is enclosed. Please post the permit and this letter in a conspicuous location at the site.

Very truly yours,



Ralph C. Pickard
Technical Secretary

MAR/tr

Enclosure

cc: City of Gary Health Department

Attn.: Dr. Earl Caldwell

bcc: Approval Book

Mr. George Oliver

tr 0928m 2/4/82

file

February 16, 1982

VIA CERTIFIED MAIL

Mr. Lawrence Hagen
Gary Development Company, Inc.
479 North Cline Avenue
P.O. Box 6056
Gary, IN 46406

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Dear Mr. Hagen:

Re: Renewal of Operating Permit
for Sanitary Landfill Operation
Gary Development Landfill
Lake County

The review of information submitted in your application for renewal of an operating permit for a sanitary landfill which we received on November 17, 1980; has been completed. The sanitary landfill project, located in that part of the W 1/2 of the SW 1/4 of Section 35 lying north of the Grand Calumet River, T37N, R9W, containing approximately 61.9 acres, was issued a construction plan permit on June 21, 1973. This facility shall be operated in accordance with Rule 330 IAC 4-1, et seq. (Regulation SPC-18), and Construction Plan Permit SW 133.

The above-referenced sanitary landfill project is hereby granted a renewal of Operating Permit No. 45-2, with the following conditions:

1. That sandy, granular material under the unified soil Classification of SW and SP not be used for daily cover.
2. That the clay perimeter seal be compacted to 90% Standard Proctor density.
3. That results of compaction tests conducted on the perimeter seal be submitted to the Division of Land Pollution Control staff within 15 days of completion of the tests.
4. That after each section of leachate collection pipe is installed, it be inspected by a Division of Land Pollution Control staff member before it is covered.
5. That the discharge of water from the site to the Grand Calumet River or other waters of the State of Indiana shall not occur except in conformity with an approved NPDES permit.